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**THE ADOPTION OF GREEN POLICY
AND ITS CONTRIBUTION IN HOTEL INDUSTRY**

NORFIZA BT MAT ZAIN

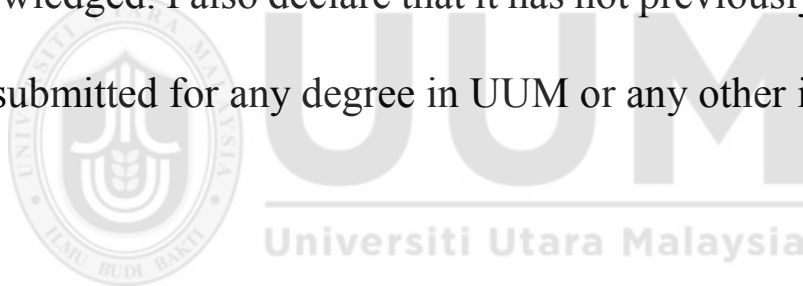
816710



**Thesis Submitted to Othman Yeop Abdullah Graduate School of Business,
Universiti Utara Malaysia,
In Fulfillment of the Requirement for
Master of Science (International Accounting)**

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I hereby declare that this thesis is based on my original work, except for quotations and citations, which have been duly acknowledged. I also declare that it has not previously or currently been submitted for any degree in UUM or any other institutions.



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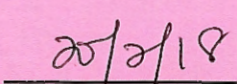
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ABSTRACT

This study examines the adoption of green policy and the contribution to the implementation of green practices in the hotel industry. The sample of this study were hotels located in Kedah and Perlis. The study applied mix-mode method approach, which consists of questionnaire and interview. This study investigated on three dimensions for determinant independent variables; internal practices, environmental impact, and socio-economic impact. Green practices were measured as the dependent variable. Based on the findings, most of the hotels did not fully implement green practices. The hotels mostly did not have standard documentation or management related to green policy. Hotels that adopted a green policy on internal practices, environmental impact and socio-impact were part of the contribution towards green practices. Limitation of the study were the sample of hoteliers does not sufficiently cover the whole population of hotel industries. However, it was observed that the hoteliers were not firm in practicing green policy. They lack of knowledge and skills, lack of professional adviser, an uncertain of the outcome, lack of verifiers, lack of resources, implementation and allocation cost of maintenance. Besides, regulation and government played an important role to hoteliers to be firm in their implementation of green practices. The green policy and practices should comply to the international standard and should be defined and documented by top management, and be easily accessible as evidence of its implementation by the organization. The organization should communicate environmental policy practices to staffs, clients, and suppliers and encourage them to participate. Organizations should focus on water conservation where plans for water saving and encouragement for efficient water consumption should be established. Organizations should also plan for efficiently designed installation sites of power and energy equipment.

Keywords: Green Policy, Green Practices, Green Management

ABSTRAK

Kajian ini mengkaji adaptasi dasar hijau dan sumbangan pelaksanaan amalan hijau dalam industri hotel. Sampel kajian ini adalah hotel yang terletak di Kedah dan Perlis. Kajian ini menggunakan pendekatan kaedah mod campuran, yang terdiri daripada soal selidik dan temu bual. Kajian ini menyiasat tiga dimensi bagi pemboleh ubah bebas penentu; amalan dalaman, impak alam sekitar, dan kesan sosio-ekonomi. Amalan hijau diukur sebagai pemboleh ubah bergantung. Berdasarkan hasil penemuan, kebanyakan hotel tidak melaksanakan amalan hijau sepenuhnya. Hotel kebanyakannya tidak mempunyai dokumentasi standard atau pengurusan yang berkaitan dengan dasar hijau. Hotel-hotel yang mengamalkan dasar hijau mengenai amalan dalaman, kesan alam sekitar dan impak sosio-ekonomi adalah sebahagian daripada sumbangan ke arah amalan hijau. Batasan kajian adalah sampel pengusaha hotel tidak mencakupi seluruh industri perhotelan. Walau bagaimanapun, sebab dan akibat adalah pengusaha hotel tidak tegas untuk mengamalkan dasar hijau. Mereka kurang pengetahuan dan kemahiran, kurang penasihat profesional, ketidakpastian hasil, kurang pengesahan, kekurangan sumber, pelaksanaan dan kos penyenggaraan kos. Di samping itu, peraturan dan kerajaan memainkan peranan penting kepada para pengusaha hotel untuk menjadi peneraju dalam amalan hijau. Dasar dan amalan hijau harus mematuhi piawaian antarabangsa dan ditakrifkan serta didokumenkan oleh pengurusan atasan, dan mudah diakses sebagai bukti organisasi. Organisasi ini akan menyampaikan amalan dasar alam sekitar kepada kakitangan, pelanggan, dan pembekal untuk menyertai. Akhir sekali, Matlamat Pembangunan Mampan (SDG) telah ditujukan ke sektor hotel untuk melaksanakan amalan hijau dan pendekatan sosio-ekonomi. Menjelang 2030, sasaran dunia untuk mengurangkan pelepasan karbon pada skala. Tumpukan projek pemuliharaan air untuk menubuhkan pelan atau aktiviti untuk penjimatan air dan menggalakkan penggunaan air yang cekap. Mengenai tenaga boleh diperbaharui, organisasi itu akan merekacipta dengan cekap untuk tapak pemasangan peralatan kuasa dan tenaga.

Kata kunci: Dasar Hijau, Amalan Hijau, Pengurusan Hijau

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CHAPTER ONE

INTRODUCTION

Environmental issues affect the management of a hotel's daily operations. The general manager is responsible for implementing the hotel's environmental policy at the unit level (Brown, 1996). Consequently, reinforcement of global awareness turns into stakeholder accountability and financial transparency (McLaren, 2004). Unfortunately, environmental impact has become extremely important economically, socially and politically (Mathews, 1997).

In consequence of the incident, Elkington (1997) introduced a triple bottom line concept, known as the 3Ps: Profit, People and Planet. "People", including stakeholders, refers to human capital responsible for promotion and social welfare. "Profit" means the organization could bring economic value and progress by utilizing internal and external resources. "Planet" included natural resources for maintaining the environment and minimizing waste production to ensure sustainability and to obtain natural resources for future undertakings. The concept of triple bottom line refers to the social, environmental and economic value of an investment. It refers to increasing development in related fields, such as business, finance, planning and real estate (Hammer & Pivo, 2016).

This chapter provides an overview of the background of the study, problem statement, research questions, the objectives of the study, motivation of the study and finally the significance of the study.

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- http://hotelexecutive.com/business_review/2643/analyzing-the-cost-benefits-of-green-hotels
- <http://green.hotelscombined.com/Gyh-The-Business-Case-For-Sustainability.php>
- <http://www.yourarticlelibrary.com/economics/environmental-economics/green-accounting-need-objectives-problems-and-other-details/39675/>
- <https://www.iso.org/standard/60856.html>

APPENDICES

Appendix A: Sample of Hotels

1. Berjaya Langkawi Beach Resort & Spa
Karung Berkunci 200, Buray Bay, 07000 Langkawi, Kedah
04-959 1888
2. Four Seasons Resort Langkawi
Jalan Tanjung Rhu, Mukim Air Hangat, 07000 Langkawi, Kedah
04-950 8888
3. Grand Alora Alor Setar
No.888, Persiaran Bandar Baru Mergong, Lebuhraya Sultanah Bahiyah, 05150 Alor Setar, Kedah
04-7708888
4. Meritus Pelangi Beach Resort & Spa Langkawi
Pantai Cenang, 07000 Langkawi, Kedah
04-952 8888
5. The Westin Langkawi Resort & Spa
Jalan Pantai Dato' Syed Omar, Kedah
04-966 2020
6. Adya Hotel Langkawi
No 1, Pt 4001, Pusat Dagangan & Pelancongan Kelana Mas, Jln Persiaran Mutiara, 07000 Langkawi, Kedah
04-9608000
7. Casa Del Mar
Lot 1228, Jalan Pantai Cenang, Mukim Kedawang, 07000 Langkawi, Kedah
04-9552388
8. Dayang Bay Serviced Apartment & Resort
No. 15 Persiaran Pelangi 07000 Kuah, Langkawi , Kedah
9. Four Points By Sheraton Langkawi Resort
Kuala Muda, Padang Matsirat, 07000 Langkawi, Kedah
10. Holiday Villa Alor Star
Lot 162 & 163, Jalan Tunku Ibrahim, 05000 Alor Setar, Kedah
04-734 9999

11. Holiday Villa Langkawi Beach Resort
Lot 1698, Pantai Tengah, Mukim Kedawang, 07000 Langkawi, Kedah
04-955 1701
12. Hotel Park Avenue Sg. Petani
E1, Jalan Indah 2, Tmn Sejati Indah, 08000 Sg. Petani, Kedah
04-431 7777
13. Ombak Villa Langkawi
Lot 78, Kg Kuala Melaka, Jalan Kuala Muda, Pdg Mat Sirat 07100 Langkawi, Kedah
049558181
14. Resort World Langkawi
Tanjung Malai, 07000 Langkawi, Kedah
04-9555111
15. Resorts World Langkawi
Tanjung Malai, 07000 Langkawi, Kedah
04-955 5111
16. Th Hotel & Convention Centre Alor Setar
Lot 3860, Mukim Titi Gajah, Seksyen 2, Bandar Anak Bukit, 06020 Kota Setar, Kedah
04-740 3666
17. The City Bayview Hotel, Langkawi
Jalan Pandak Mayah 1, Pusat Bandar Kuah, 07000 Langkawi, Kedah
04-966 1818
18. Nadias Hotel Langkawi
Lot 977, Pantai Cenang, Mukim Kedawang, 07000 Langkawi, Kedah
04-9551401
19. Starcity Hotel Alor Star
88, Jalan Pintu Sepuluh, 05150 Alor Setar, Kedah
04-7355888
20. Bella Vista Waterfront Resort
Persiaran Mutiara, Pusat Dagangan Kelana Mas, 07000 Langkawi, Kedah
04-431 2323

21. Cinta Sayang Golf & Country Resort
Persiaran Cinta Sayang, 08000 Sg. Petani, Kedah
04-441 4666
22. Langkawi Seaview Hotel
Lot 40, Jalan Penarak, Mukim Kuah, 07000 Langkawi, Kedah
04-966 0600
23. Casa Del Mar
Jalan Pantai Cenang, Mukim Kedawang, Pantai Cenang, Langkawi 07000, Malaysia.
04-9552388
24. The Pure Hotel Sungai Petani
No. A-2 Jalan Indah 1, Taman Sejati Indah, 08000 Sungai Petani, Kedah
04-4303000
25. The Frangipani Langkawi Resort & Spa
Jalan Teluk Baru, Pantai Tengah, Mukim Kedawang , 07000 Langkawi , Kedah
04-955 1511
26. The Lanai Langkawi
Jalan Pantai Tengah, Mukim Kedawang, 07000 Langkawi, Kedah
04-955 2262
27. Citin Hotel Langkawi
No. 3 Pekan Kuah, 07000 Langkawi, Kedah
04-966 9000
28. Hotel Grand Continental
Lot 398, Mukim Kuah, 07000 Langkawi, Kedah
04-966 0333
29. The Leverage Business Hotel
No 12, Jalan Lengkok Sari, Tmn Bndr Baru Mergong, 05150 Alor Setar, Kedah
30. Emerald Puteri Hotel
50, Jalan Permatang Gedung, Taman Sejati Indah, 8000 Sg. Petani, Kedah
04-431 5555
31. Hotel Regent
1536-G, Jalan Sultan Badlishah, 05000 Alor Setar, Kedah
04-731 1900

32. Hotel Putra Palace
135, Persiaran Jubli Emas, 01000 Kangar, Perlis
33. Hotel Seri Malaysia Alor Setar
Lot 005127, Mukim Alor Malai, Jalan Stadium, 05100 Alor Setar, Kedah
04-730 8783
34. Hotel Seri Malaysia Sungai Petani
Seksyen 21, Jalan Pasar, 08000 Sg. Petani, Kedah
35. Putra Brasmana Hotel
Jalan Kampung Perak, , 02000 Kuala Perlis, Perlis
04-9855900
36. Sungai Petani Inn
427, Jalan Kolam, 08000 Sg. Petani, Kedah
04-421 3411
37. Swiss Inn Hotel Sungai Petani
No. 1 Jalan Pahlawan, 08000 Sungai Petani, Kedah
04-422 3333
38. Hotel Bustani
Jalan Jitra Changlun Jitra, 06000 Kubang Pasu, Kedah
04-9177 777
39. Bon Ton Resort Langkawi
Lot 1047 Pantai Cenang, 07000 Langkawi, Kedah
04-955 3643
40. Fave Hotel Langkawi
Lot 119, Pantai Tengah, Mk Padang Mat Sirat, 07000 Langkawi, Kedah
04-955 6600

Appendix B: Questionnaire

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THE ADOPTION OF GREEN POLICY AND ITS CONTRIBUTION TO GREEN PRACTICES IN HOTEL INDUSTRY

Dear Participants,

I am masters' student from Universiti Utara Malaysia doing a research entitled "The Adoption of Green Policy and Its Contribution to Green Practices in Hotel Industry". The main purpose of this research is to examine the adoption of green practices among hoteliers. Thus, I am very grateful if you could participate in this survey.

The survey will take about ten minutes to complete. All your responses will be kept STRICTLY CONFIDENTIAL. Only the researchers will have access to your individual survey responses. If you are interested in the result of the survey, please do not hesitate to contact us.

The success of this study highly depends on your assistance. Thank you for your time spent to complete the survey.

Your participation and cooperation is highly appreciated.

Norfiza Mat Zain

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Shafinaz
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Appendix C: Normality Test

Descriptives			
		Statistic	Std. Error
Mean_IP	Mean	3.5485	.21055
	95% Confidence Interval for Mean		
	Lower Bound	3.1179	
	Upper Bound	3.9791	
	5% Trimmed Mean	3.6027	
	Median	3.7273	
	Variance	1.330	
	Std. Deviation	1.15326	
	Minimum	1.00	
	Maximum	5.00	
	Range	4.00	
	Interquartile Range	1.98	
	Skewness	-.355	.427
	Kurtosis	-.740	.833
Mean_EI	Mean	3.5492	.18993
	95% Confidence Interval for Mean		
	Lower Bound	3.1608	
	Upper Bound	3.9377	
	5% Trimmed Mean	3.5984	
	Median	3.5476	
	Variance	1.082	
	Std. Deviation	1.04028	
	Minimum	1.20	
	Maximum	5.00	
	Range	3.80	
	Interquartile Range	1.27	
	Skewness	-.374	.427
	Kurtosis	-.021	.833
Mean_SEI	Mean	3.5267	.21982
	95% Confidence Interval for Mean		
	Lower Bound	3.0771	
	Upper Bound	3.9762	
	5% Trimmed Mean	3.5852	
	Median	4.0000	
	Variance	1.450	
	Std. Deviation	1.20400	
	Minimum	1.00	
	Maximum	5.00	
	Range	4.00	
	Interquartile Range	1.80	
	Skewness	-.494	.427
	Kurtosis	-.610	.833

Appendix D: Reliability Test

Scale: Internal Practices

Reliability Statistics

	Cronbach's Alpha Based on Standardized Items	N of Items
Cronbach's Alpha		
.951	.953	11

Inter-Item Correlation Matrix

	IPa	IPb	IPc	IPd	IPe	IPf	IPg	IPh	IPi	IPj	IPk
IPa	1.000	.828	.849	.812	.531	.639	.764	.673	.593	.618	.643
IPb	.828	1.000	.711	.637	.430	.572	.739	.535	.636	.520	.670
IPc	.849	.711	1.000	.777	.663	.663	.774	.658	.580	.642	.665
IPd	.812	.637	.777	1.000	.516	.669	.693	.617	.624	.545	.503
IPe	.531	.430	.663	.516	1.000	.569	.428	.547	.263	.367	.458
IPf	.639	.572	.663	.669	.569	1.000	.818	.856	.754	.615	.701
IPg	.764	.739	.774	.693	.428	.818	1.000	.781	.803	.715	.828
IPh	.673	.535	.658	.617	.547	.856	.781	1.000	.656	.582	.726
IPi	.593	.636	.580	.624	.263	.754	.803	.656	1.000	.662	.703
IPj	.618	.520	.642	.545	.367	.615	.715	.582	.662	1.000	.767
IPk	.643	.670	.665	.503	.458	.701	.828	.726	.703	.767	1.000

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
IPa	35.67	129.057	.856	.886	.943
IPb	36.27	128.340	.763	.797	.947
IPc	35.30	131.666	.858	.838	.943
IPd	35.67	130.644	.778	.762	.946
IPe	35.20	138.924	.564	.641	.954
IPf	35.40	133.283	.827	.851	.944
IPg	35.63	131.275	.896	.884	.942
IPh	35.23	137.289	.800	.811	.946
IPi	35.50	134.879	.751	.763	.947
IPj	35.07	139.306	.720	.687	.948
IPk	35.40	135.559	.802	.818	.945

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
39.03	160.930	12.686	11

Scale: Environment Impact

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.958	.959	21

Inter-Item Correlation Matrix

	EI1	EI2	EI3	EI4	EI5	EI6	EI7	EI8	EI9	EI10	EI11	EI12	EI13	EI14	EI15	EI16	EI17	EI18	EI19	EI20	EI21
EI1	1.00	.83	.89	.67	.72	.55	.62	.58	.59	.55	.47	.64	.38	.53	.57	.69	.64	.53	.67	.38	.42
EI2	.83	1.00	.74	.63	.52	.31	.47	.47	.47	.46	.45	.61	.37	.43	.48	.61	.55	.44	.51	.24	.35
EI3	.89	.74	1.00	.70	.67	.55	.56	.55	.56	.59	.60	.65	.37	.48	.46	.59	.66	.54	.67	.30	.48
EI4	.67	.63	.70	1.00	.46	.22	.64	.28	.65	.40	.29	.37	.28	.33	.25	.66	.50	.32	.44	.58	.69
EI5	.72	.52	.67	.46	1.00	.68	.56	.58	.51	.63	.53	.62	.22	.47	.45	.45	.67	.69	.92	.55	.64
EI6	.55	.31	.55	.22	.68	1.00	.50	.65	.43	.62	.54	.66	.43	.47	.54	.22	.58	.69	.68	.42	.27
EI7	.62	.47	.56	.64	.56	.50	1.00	.67	.84	.60	.45	.54	.56	.56	.47	.69	.46	.51	.67	.50	.60
EI8	.58	.47	.55	.28	.58	.65	.67	1.00	.57	.78	.73	.65	.56	.76	.65	.44	.55	.48	.64	.25	.34
EI9	.59	.47	.56	.65	.51	.43	.84	.57	1.00	.53	.43	.44	.67	.53	.35	.74	.41	.25	.48	.42	.69
EI10	.55	.46	.59	.40	.63	.62	.60	.78	.53	1.00	.89	.73	.44	.70	.62	.42	.64	.59	.69	.44	.46
EI11	.47	.45	.60	.29	.53	.54	.45	.73	.43	.89	1.00	.68	.54	.56	.50	.43	.51	.39	.57	.23	.34
EI12	.64	.61	.65	.37	.62	.66	.54	.65	.44	.73	.68	1.00	.57	.53	.71	.37	.77	.77	.69	.44	.34
EI13	.38	.37	.37	.28	.22	.43	.56	.56	.67	.44	.54	.57	1.00	.41	.44	.49	.24	.19	.24	.25	.33
EI14	.53	.43	.48	.33	.47	.47	.56	.76	.53	.70	.56	.53	.41	1.00	.84	.56	.52	.44	.47	.19	.40
EI15	.57	.48	.46	.25	.45	.54	.47	.65	.35	.62	.50	.71	.44	.84	1.00	.48	.65	.62	.49	.30	.23
EI16	.69	.61	.59	.66	.45	.22	.69	.44	.74	.42	.43	.37	.49	.56	.48	1.00	.37	.12	.38	.26	.52
EI17	.64	.55	.66	.50	.67	.58	.46	.55	.41	.64	.51	.77	.24	.52	.65	.37	1.00	.73	.64	.58	.45
EI18	.53	.44	.54	.32	.69	.69	.51	.48	.25	.59	.39	.77	.19	.44	.62	.12	.73	1.00	.82	.57	.39
EI19	.67	.51	.67	.44	.92	.68	.67	.64	.48	.69	.57	.69	.24	.47	.49	.38	.64	.82	1.00	.52	.61
EI20	.38	.24	.30	.53	.55	.42	.50	.25	.42	.44	.23	.44	.25	.19	.30	.26	.58	.57	.52	1.00	.68
EI21	.42	.35	.48	.69	.64	.27	.60	.34	.69	.46	.34	.34	.33	.40	.23	.52	.45	.39	.61	.68	1.00

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
EI1	73.68	360.078	.816	.	.955
EI2	73.89	365.729	.678	.	.957
EI3	73.46	360.776	.799	.	.955
EI4	73.18	373.708	.624	.	.957
EI5	72.96	370.258	.781	.	.955
EI6	73.07	369.921	.681	.	.956
EI7	73.07	371.550	.774	.	.955
EI8	73.46	366.258	.771	.	.955
EI9	73.07	372.513	.710	.	.956
EI10	73.50	360.111	.813	.	.955
EI11	73.54	360.554	.695	.	.957
EI12	73.04	368.258	.811	.	.955
EI13	73.11	379.358	.542	.	.958
EI14	73.75	368.417	.696	.	.956
EI15	73.43	370.921	.690	.	.956
EI16	73.04	379.888	.648	.	.957
EI17	72.93	368.958	.758	.	.956
EI18	72.71	378.804	.684	.	.957
EI19	72.89	370.247	.801	.	.955
EI20	72.61	383.433	.530	.	.958
EI21	72.75	381.898	.614	.	.957

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
76.86	407.683	20.191	21

Scale: Socio-Economic Impact

Reliability Statistics

	Cronbach's Alpha Based on Standardized Items	N of Items
Cronbach's Alpha	.908	.911
		5

Inter-Item Correlation Matrix

	SEIa	SEIb	SEIc	SEId	SEIe
SEIa	1.000	.849	.502	.587	.587
SEIb	.849	1.000	.543	.589	.589
SEIc	.502	.543	1.000	.740	.740
SEId	.587	.589	.740	1.000	1.000
SEIe	.587	.589	.740	1.000	1.000

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
SEIa	13.93	24.064	.714	.	.900
SEIb	13.80	24.441	.735	.	.895
SEIc	14.33	23.126	.714	.	.902
SEId	14.23	23.495	.852	.	.872
SEIe	14.23	23.495	.852	.	.872

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
17.63	36.240	6.020	5



Appendix E: Descriptive Statistics for Variables

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Mean_IP	30	1.00	5.00	3.5485	1.15326
Mean_EI	30	1.20	5.00	3.5492	1.04028
Mean_SEI	30	1.00	5.00	3.5267	1.20400
Valid N (listwise)	30				



Appendix F: Regression

Case Processing Summary

Unweighted Cases ^a		N	Percent
Selected Cases	Included in Analysis	30	96.8
	Missing Cases	1	3.2
	Total	31	100.0
Unselected Cases		0	.0
Total		31	100.0

Dependent Variable Encoding

Original Value	Internal Value
0	0
1	1

a. If weight is in effect, see classification table for the total number of cases.

Block 0: Beginning Block

Classification Table^{a,b}

	Observed	Predicted		
		GreenPrac2		Percentage Correct
		0	1	
Step 0	GreenPrac2 0	0	12	.0
	1	0	18	100.0
	Overall Percentage			60.0

a. Constant is included in the model.

b. The cut value is .500

Variables in the Equation

	B	S.E.	Wald	df	Sig.	Exp(B)
Step 0 Constant	.405	.373	1.184	1	.277	1.500

Variables not in the Equation

	Score	df	Sig.
Step 0 Variables	Mean_IP	1	.038
	Mean_EI	1	.064
	Mean_SEI	1	.035
	Overall Statistics	3	.139

Block 1: Method = Enter

Omnibus Tests of Model Coefficients

	Chi-square	df	Sig.
Step 1	Step	3	.104
	Block	3	.104
	Model	3	.104

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	34.229 ^a	.185	.251

a. Estimation terminated at iteration number 5 because parameter estimates changed by less than .001.

Hosmer and Lemeshow Test

Step	Chi-square	df	Sig.
1	6.540	7	.478

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I. for EXP(B)	
								Lower	Upper
Step 1 ^a	Mean_IP	-.757	.695	1.185	1	.276	.469	.120	1.833
	Mean_EI	.936	1.240	.569	1	.451	2.549	.224	28.980
	Mean_SEI	-1.020	.877	1.352	1	.245	.361	.065	2.012
	Constant	3.515	1.814	3.755	1	.053	33.615		

a. Variable(s) entered on step 1: Mean_IP, Mean_EI, Mean_SEI.



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Appendix G: ASEAN Green Hotel Standard Criteria on Audit

Major Criteria No.1 Environmental policy and actions for hotel operation			
Requirement		Indicator	Criteria of audit
1	Promotion of environmental activities in order to encourage the involvement of hotel staffs, clients and suppliers to participate in environmental management practices.	List of environmental activities / programs implemented in connection with the encouragement of staff / clients / suppliers to participate in.	M1) Environmental policy/practice (compliant with the international standard) shall be defined and documented by top management, and easily accessible as evidence of the organization. M2) The organization shall communicate environmental policy practice to staffs, clients and suppliers to participate in.
2	Existence of plan for raising staffs to be aware of environment i.e. training.	Environmental awareness rising plan (s).	M1) The organization shall establish environmental management training plan for staff's improvement. M2) The organization shall maintain up-to-date training records. M3) The organization shall establish environmental activity plan to encourage staffs, (clients) and suppliers to participate. M4) Environmental activities of the organization shall be recorded; including activities of staffs, (clients) and suppliers to participate in.
3	Existence of environmental management plan for hotel operation.	Hotel environmental management plan implemented e.g laundry and kitchen.	M1) Environmental management plan shall be established, documented and implemented by the organization. M2) The organization shall have evidences on environmental activities; for example, the monthly energy saving report, the monthly water saving report, the monthly result of waste water monitoring, monthly information of reducing solid waste quantity, etc. M3) Evidences shall be provided by the organization as specified plan.
4	Existence of monitoring program	Measurement of programs / activity	M1) The organization shall have measurement method and

	for environmental management of hotels.	compliments.	monitoring team to evaluate environmental activity plans. M2) The organization shall provide evidences of continuous improvement and development in environmental activity plans.
Major Criteria No.2 Use of Green products			
	Requirement	Indicator	Criteria of audit
1	Encouragement for the use of local products for hotel operation i.e. food and handicrafts.	Purchasing criteria of local product support and promotion.	M1) The organization shall have a policy or a regulation to encourage of using local product. M2) The rooms, restaurants, lobbies, and etc. shall be decorated with local products. M3) The organization shall use local food product.
2	Encouragement for the use of environmentally friendly products.	Green procurement criteria in use.	M1) The organization shall have a policy or a regulation to encourage of using environmentally friendly products. M2) The organization shall use environmentally friendly products and biodegradable
3	Existence of plans / activities to help improve quality of life of the community.	List of community quality of life improvement.	M1) The organization shall establish plans or arrange activities for improving quality of life for example, health and education in local areas. M2) The organization shall provide evidences of conformity with activity plans.
4	Existence of awareness rising programs for local community on environmental protection.	Environmental protection awareness programs / activities implemented in community by hotel / hotel staff.	M1) The organization shall establish awareness programs/ activities on environmental protection for local community. M2) The organization shall provide evidences in conformity with its programs/ activities.
5	Creation of activities in promoting culture and traditional performance and local ways of life.	Cultural / local living promotional activities implemented in the past years.	M1) The organization shall conceive a project or establish activity for promotion of local tradition and culture. M2) The organization shall have evidences in conformity of plans.
6	Creation of job opportunity for local community.	Comparative fraction of local and non-local employments in hotel.	M1) The organization shall conceive a project or establish activity plans for supporting local workforces. M2) The organization shall

			provide evidences according to activity plans. M3) The organization shall support or create job opportunity for its local community.
Major Criteria No.3 Collaboration with the community and local the organizations			
	Requirement	Indicator	Criteria of audit
	Existence of plans / activities to help improve quality of life of the community.	List of community quality of life improvement.	M1) The organization shall establish plans or arrange activities for improving quality of life for example, health and education in local areas. M2) The organization shall provide evidences of conformity with activity plans.
	Existence of awareness rising programs for local community on environmental protection.	Environmental protection awareness programs / activities implemented in community by hotel / hotel staff.	M1) The organization shall establish awareness programs/ activities on environmental protection for local community. M2) The organization shall provide evidences in conformity with its programs/ activities.
	Creation of activities in promoting culture and traditional performance and local ways of life.	Cultural / local living promotional activities implemented in the past years.	M1) The organization shall conceive a project or establish activity for promotion of local tradition and culture. M2) The organization shall have evidences in conformity of plans.
	Creation of job opportunity for local community.	Comparative fraction of local and non-local employments in hotel.	M1) The organization shall conceive a project or establish activity plans for supporting local workforces. M2) The organization shall provide evidences according to activity plans. M3) The organization shall support or create job opportunity for its local community.
Major Criteria No.4 Human resource development			
1	Provision of training programs for operation and management staff on environmental management.	Environmental management training programs / activities created implemented by hotel for staff in the past years (1-2	M1) Environmental training plan shall be documented by the organization and announce to staffs. M2) Environmental training curriculum/ module of staff shall be evaluated.

		years).	M3) The organization shall provide records of environmental training.
Major Criteria No.5 Solid waste management system			
	Requirement	Indicator	Criteria of audit
1	Introduction of waste management techniques e.g. waste reduction, reuse, recycling, waste separation and composting.	Waste handling and management training programs / activities implemented in the past years for staff.	M1) Waste management shall abide by the law or be in accordance with relevant academic frameworks, for example, assessment may be done through exploring records of waste volume and provision of spaces for waste segregation etc. M2) The organization shall apply 3R's principles for solid waste management.
2	Encouragement of the involvement of hotel staff in waste reduction, reuse, recycling, waste separation and composting program.	Programs / activities encouraging involvement of hotel staff in waste handling and management in the past years.	M1) The organization shall conceive a project or activity plans for encouraging good practices on waste management in the organization, for example, waste reduction, reuse, recycling, waste segregation. M2) The organization shall provide evidences showing that activities are carried out according to the plans.
3	Encouragement of the involvement of hotel client in reuse, recycling, waste separation.	Programs / activities encouraging client involvements in waste handling, management and minimization in the past years.	M1) The organization shall communicate through public announcement or in-house activities to encourage its customers to participate in waste management programs. M2) The organization shall support waste sorting activities into different types, such as, non- recyclable-waste, recyclable waste, hazardous waste according to different waste management methods required etc. and provide the different color of recycle bins in the public area and guest room. M3) The organization shall have activities encouraging client to support waste management of the hotel, for example giving the options of using recyclable/ biodegradable plastics /fabric bags to the clients.

Major Criteria No.6 Energy efficiency			
Requirement		Indicator	Criteria of audit
1	Introduction of energy saving techniques and / or energy saving technology and equipment for hotel to reduce energy consumption.	Installation and use of energy efficient technologies and techniques in hotel in the past years.	M1) The organization shall establish plans, policies and activities for encouraging saving energy. M2) The organization shall selectively utilize electrical appliances and equipments with energy savings efficiency, for example, energy efficient lighting, or low loss ballast and other appliances certified with the highest energy saving rated as NO.5. M3) The organization shall encourage staffs to involve in energy efficiency activities
2	Installation of meters / equipment to monitor energy consumption.	Installation of power and energy consumption metering technologies.	M1) The organization shall efficiently design for installation sites of power and energy metering equipments. M2) The organization shall separately collect records of energy consumption for every location.
3	Encouragement of the involvement of hotel Guest in energy saving.	Invitation and encouragement messages to promote hotel guest in energy efficiency in hotel.	M1) The organization shall encourage client to save energy, possibly using energy saving friendly reminder in the guest rooms and advertisement boards.
Major Criteria No.7 Water efficiency and water quality			
Requirement		Indicator	Criteria of audit
1	Introduction of water saving techniques and / or use of water saving technology and equipment to reduce water consumption.	Installation and use of water efficient technologies and practices in hotel in the past years.	M1) The organization shall establish plans or activities for water saving and encouraging efficient water consumption. M2) The organization shall document a guideline for reducing water consumption of staff. M3) The organization shall use efficient water sanitary ware such as automatic tap, low- flow dual flush toilet,etc. M4) The organization shall reuse water for the proper activities according to law and in the safety way. M5) The organization shall collect data and statistics of water

			consumption and expenses.
2	Regular maintenance for water saving equipment.	Maintenance reports of engineering team on water efficient technologies.	M1) The organization shall establish maintenance plan of sanitary ware or water saving equipment; including to checking leak water area. M2) The organization shall record the result of maintaining plan of sanitary ware or water saving equipment; including to checking leak water area.
3	Encouragement of the involvement of hotel guest in water saving.	Promotional media / practices for hotel guests on water efficiency involvements.	M1) The organization shall promote for encouraging clients to participate in water saving campaign, for instance of water saving friendly reminder in guest room and advertisement board. M2) The organization shall provide a regulation for water saving and asking for cooperation from clients, for example, defining the frequency of changing bed sheet and towel, etc.
4	Ensure the quality of water used in the hotel.	water quality testing	M1) The organization shall establish a plan to test the quality of water consumed at least once a year. M2) The organization shall provide the water quality testing report according to related standard. M3) The organization shall have contingency plan in case the water consumed does not meet the standard.

Major Criteria No.8 Air quality management (indoor and outdoor)

Requirement		Indicator	Criteria of audit
1	Designation of smoking and nonsmoking area.	Photo of smoking and non-smoking areas designated in hotel.	M1) The organization shall provide separate smoking area from center area and post the symbol. M2) The organization shall launch non-smoking campaigns in the hotel area.
2	Regular monitoring and maintenance for equipment and hotel facilities to ensure the air quality i.e. air conditioning.	Maintenance report of air conditioning / ventilating technologies to ensure good air quality in hotel.	M1) The organization shall establish maintenance plan of generator and air conditioning system. M2) The organization shall record the result of the maintenance in

			accordance with the maintenance plan.
Major Criteria No.10 Waste water treatment and management			
	Requirement	Indicator	Criteria of audit
1	The use of mechanisms to prevent water contamination and reduce waste water generation.	Program implementation on minimization of water contamination and pollution prevention in hotel in the past years.	M1) Waste water treatment system plan shall be documented by the organization. M2) The organization shall have a method to evaluate the risk of water contaminated in hotel activities. M3) The organization shall have an evaluation report for the risk of water contamination and corrective and preventive actions in hotel activities.
2	Promotion of the use of recyclable/grey water in operation i.e. watering trees.	Proves of hotel's promotion to reuse water and use of treated water in hotel.	M1) The organization shall establish a policy or a guideline of water reuse for example, for watering plants. M2) The organization shall have activities in conformity with policy or guideline of water reuse for example, for watering plants.
3	Encouragement for an appropriate use of waste water treatment.	Implementation of waste water treatment in hotel.	M1) The organization shall provide waste water treatment system suitable for size and activities of hotel where there is no support of waste water treatment system outside. M2) The organization shall provide a report of waste water treatment system control and maintenance if applicable. M3) The organization shall provide waste water quality testing report according to the related standard if applicable. M4) The organization shall install a grease trap system in kitchen, restaurant and grease contaminated area. M5) The organization shall have a contingency plan in case the waste water does not meet the standard if applicable.